

ENGAGING THE WORLD IN DIALOGUE ABOUT SPACE: HUMANS IN SPACE YOUTH ART COMPETITION. J.C.McPhee, Universities Space Research Association (USRA), 3600 Bay Area Blvd., Houston, TX 77058, jancy.c.mcphee@nasa.gov.

Introduction: Future space travel and exploration success requires a knowledgeable and innovative workforce and strong public support. In our increasingly technology-inundated and globally-interconnected community, we need to use novel and engaging approaches to promote interest in and public attention to space. Through appropriate methods, adults and young people from diverse skill backgrounds and cultures can be inspired to learn and think about space science and contribute to discussions about its future priorities, relevance, and activities. In this manner, citizens can actively participate in the “brainstorming and concept development” phase of science, which precedes the “data crunching” phase for which citizen scientists already have several opportunities.

Projects that integrate space science and technology topics with artistic expression and conceptualization, in particular, have the potential to stir people of all ages and interests and provide an array of different methods to communicate ideas about the future and stimulate discussion worldwide. This communication allows the space science community to reach “out” to the public, enhancing their awareness and understanding of space activities, while also providing a mechanism for the public to reach “in” to the space community, offering their thoughts about future space science activities. Historically, artistic conceptualizations have successfully aided scientists and engineers in the creation of “real” technological advances. Since artwork of many types (musical, literary, visual, video) can be captured digitally, inspiring multimedia products can be produced and available online through websites and social media to virtually anyone, anywhere, and at any time. At the same time, these products can be available at local exhibit or performance events for more intimate and direct impact. Such multi-pronged approaches and resulting widespread dialogues can potentially increase global investment in and support for future space exploration.

2010 Humans in Space Youth Art Competition:

Using these basic concepts, the 2010 Humans in Space Youth Art Competition project was designed in conjunction with the 18th International Academy of Astronautics’ (IAA) Humans in Space Symposium in Houston, Texas (April 11-15, 2011). The main partners for this competition were the National Aeronautics and Space Administration (NASA) and USRA. In the first project phase, an international online competition invited young people 10-17 years old worldwide to submit visual, literary, musical, and video artwork express-

ing “What is the future of human space flight, and why is it important?” Through the Competition design, young people were thus encouraged to learn about space and use their knowledge creatively to communicate their visions about the future. The Competition received 550 art entries from 22 countries distributed across 5 continents. An international panel of 71 judges (including artists, scientists, teachers, engineers, astronauts, and others) evaluated the artwork online and provided the scores used to determine the winners.



What's Your Horizon, Mayisha Nakib, Age 17, United States. Artwork from the 2010 Humans in Space Youth Art Competition.

In the second project phase, the youth artwork was woven into displays and performances to inspire the public, promote dialogue about space, and bring fresh ideas into the space community. The inaugural display and live multimedia performance of the 2010 Youth Art Competition artwork was held at the Humans in Space Symposium, where adult attendees from the international space community were exposed to the art and messages of the youth. During a “Meet-the-Artist Event”, ten youth artists and hundreds of Symposium attendees were also offered an opportunity to directly exchange youth ideas and adult expert experience. Since then, an additional 32 displays and performances of the youth artwork have been held around the world to encourage more dialogue and exchange of concepts and ideas about the future of space. Through these events, an additional 70 local youth performers and thousands of viewers of all ages and backgrounds have participated directly in the project-promoted discussions. The 2010 youth artwork is also permanently displayed in an Online Gallery

(www.humansinspaceart.org) for 100,000's of viewers to explore, ponder and comment upon. [1]

2012 Humans in Space Youth Art Competition:

The main partners for the currently active 2012 Competition are USRA, NASA's Planetary Sciences Division and Human Research Program, and the Institute of Aerospace Medicine, German Aerospace Center. An online call for artwork ran from March to November 2012 asking for 10-18 year old participants to address the question, "How will humans use science and technology to explore space, and what mysteries will we uncover?" 2,100 visual, literary, musical and video art entries were submitted from 52 countries, with 2,600 participating artists. The evaluation of the artwork was performed by 220 judges from 32 countries. The judges included space scientists, engineers, astronauts, teachers, and graduate students, as well as, artists, musician/composers, film producers, writers and publishers, architects, medical doctors, diplomats, lawyers, web designers, managers and directors. Judges' scores will be used to determine the winning entries of the competition in the early spring 2013.

Beginning in March 2013 during the 2nd phase of the project spanning 2013-2014, winning entries will be woven into multimedia displays and performances held worldwide. Anyone will be encouraged to apply to host an exhibit event for their local community via information provided on the Competition website. A few key events already planned include several public and private displays and live performances for the 19th IAA Humans in Space Symposium in Cologne, Germany in July 2013. Top youth artists will be invited to participate in a Visiting Artist's Program in Cologne as well to allow for in-person communication between youth artists and artwork viewers of all ages and backgrounds. Additional exhibit events will be held at various locations associated with NASA's 50 Years of Solar System Exploration Celebration, the International Space Station, an artwork "moonbounce" relayed by the Dwingeloo Radio Telescope, the UNESCO headquarters, the 2013 and 2014 International Astronautical Congresses, and many more places around the United States and the globe. As with the 2010 artwork, the 2012 artwork will also be permanently displayed in an Online Gallery for anyone to see at any time.

In addition to increased participation levels from artists and judges, the 2012 competition already has had numerous advances since the 2010 Competition. The online system was re-designed to be very flexible and able to handle what will likely be an even larger volume of youth art entries in future competitions. An Undergraduate Challenge Pilot Study was added in response to worldwide request to allow young adults to participate as artists by submitting their concepts about the future of space. In order to support the growing

integrated space science and arts community, dialogue about space, and information exchange, the project also created a Humans in Space Arts Facebook page which is kept active daily and has already accrued over 3200 followers since its inception 6 months ago.

Future Events Associated with the 2012 Competition and Future Competitions: The Youth Art Competition project utilizes the core umbrella principle that the creation, display, and performance of youth artwork engages, educates, and motivates participants and viewers and enhances the participation of the public and communication of their visualizations, concepts and ideas about space exploration. In the near future, the Competition organizers will develop detailed tour plans for the 2012 Humans in Space Youth Art Competition. Together with the 2010 artwork, the 2012 artwork will continue to provide a cadre of material that can be used to inspire citizens and promote dialogue about space using many different woven products, at diverse venues and for viewers of different age groups, backgrounds and cultures. In addition, we are identifying partners for the next biennial Youth Art Competition and annual Undergraduate Challenge in order to keep the project developing and stimulating discussion about the future of space. We are also considering various other project ideas that use similar principles to the Competition to gain widespread public interest and investment in the future of space flight and exploration.

A project of the dimension of the Humans in Space Youth Art Competition brings together youth and adults, artists and scientists, space organizations and educators, and international and local communities. With the help of diverse partners working together, the competition can inspire the youth of the world and encourage them to creatively communicate their thoughts about the future, while preparing them to be a part of the future space workforce and adult voting public. Presenting the youth visions, in turn, engages the broader public, raising their awareness, encouraging dialogue about space, and fostering interest in, support for and contribution as "citizen scientists" to the future of space exploration.

References: [1] McPhee J. C. (2012), 2010 International Humans in Space Youth Art Competition, 63rd International Astronautical Congress, IAC-12-E1.8.4.

Additional Information: To answer any questions about the Humans in Space Youth Art Competition, please visit the Competition website at www.humansinspaceart.org or contact Dr. Jancy McPhee at jancy.c.mcphee@nasa.gov.